DOCUMENT RESUME

ED 092 928 CS 001 216

AUTHOR Elkins, John
TITLE Learning Disability Research in Australia.
PUB DATE May 74
NOTE 17p.; Paper presented at the Annual Meeting of the International Reading Association (19th, New Orleans, Louisiana, May 1-4, 1974)

EDRS PRICE MF-$0.75 HC-$1.50 PLUS POSTAGE
DESCRIPTORS *Learning Disabilities; Literature Reviews; Reading; *Reading Achievement; Reading Difficulty; *Reading Instruction; Reading Programs; *Reading Research; Remedial Reading
IDENTIFIERS *Australia

ABSTRACT

Reviewed in this paper are some of the aspects of Australian practices and research activities in learning disabilities conducted over the past decade. Special emphasis is given to the diagnosis and treatment of children with severe reading problems. The influence of instruments such as the Illinois Test of Psycholinguistic Abilities on the pattern of clinical and classroom practices in Australian education is traced. An approach which recognizes the interaction of aptitudes and teaching strategy is suggested as perhaps being the most efficient. Also suggested is that legislative or administrative convenience may not best serve children with learning disabilities and that teachers need training to understand both the learning process and the characteristics of exceptional children. (Author/WR)

ED 092928

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

# LEARNING DISABILITY RESEARCH IN AUSTRALIA

John Elkins

Fred and Eleanor Schonell Educational Research Centre

University of Queensland

Brisbane, Australia

PERMISSION TO REPRODUCE THIS COPYRIGHTED MATERIAL HAS BEEN GRANTED BY
John Elkins

TO ERIC AND ORGANIZATIONS OPERATING UNDER AGREEMENTS WITH THE NATIONAL INSTITUTE OF EDUCATION. FURTHER REPRODUCTION OUTSIDE THE ERIC SYSTEM REQUIRES PERMISSION OF THE COPYRIGHT OWNER.

BEST COPY AVAILABLE

## ABSTRACT

Reviews some aspects of Australian practices and research activities in learning disabilities during the past decade. Special emphasis is given to the diagnosis and treatment of children with severe reading problems. The influence of instruments such as the ITPA on the pattern of clinical and classroom practices in Australian education is traced. Reviews evidence for the efficacy of diagnosis and teaching based upon the academic skill performance itself. Suggests that an approach which recognizes the interaction of aptitudes and teaching strategies may be most efficient. Since the majority of children with learning disabilities experience severe problems in reading, the role and responsibility of the special educator and reading specialist are potentially in conflict. Suggests that legislative or administrative convenience may not best serve such children and that teachers need training to understand both the learning process and the characteristics of exceptional children.

CS 001 216

Introduction

The problem of children who show little progress in learning to read when taught in regular classroom programs has long concerned educators throughout the world. I would like to begin by tracing a little of the history of attempts to deal with this problem in Australia. The pioneer of research in the teaching of reading and problems in learning to read (as well as in many aspects of special education) was the late Sir Fred Schonell. Through his early work at the Universities of London and Birmingham, he exerted considerable influence upon both methods of teaching reading and the development of achievement and diagnostic tests for use by classroom teachers. This influence was felt in many parts of the then British Commonwealth. Upon his return to his native Australia, Schonell established a Remedial Education Centre at the University of Queensland which for some twenty years was the major supplier of remedial teachers and teachers of slow learners for Australia through its course in "diagnostic testing and remedial teaching." The beginnings provided by the work of Schonell have grown considerably, though not in isolation from research and practice elsewhere. At the 3rd World Congress of IRA, O'Connell (1971) noted that Australian research had been minimal, and that classroom practices were heavily dependent upon the conventional wisdom rather than research results. There are signs that research

activity is increasing and that teachers are receiving useful information with which to modify their teaching methods. Recently Federal Government funds have been set aside for educational research and development, and several of the grants have been for reading research. Of greater significance was the adoption by the Federal government early in 1974 of the Interim Schools Committee report "Schools in Australia." Among the recommendations in the report are: (i) the need to provide primary teachers with sufficient knowledge of remedial education techniques not only to identify children with learning disabilities but also to offer treatment in less serious cases; (ii) the need for specialists in remedial work to be available to all primary schools to cope with children with severe learning problems; (iii) the need to remedy the critical shortage of specialist teachers and facilities for their preparation; (iv) the need to find ways to involve parents in helping these children.

But to expand education expenditure by 100%, to recruit teachers from overseas countries, and to establish better training facilities for teachers will be much less effective than hoped for if educational research cannot give definitive answers to many of the questions about why children have difficulties in learning and how they should be helped.

Reading Research in Australia

What, then, is the nature of reading research in Australia. As indicated, Australia has no more an indigenous research program than a distinctive cuisine. Research in reading, especially that related to difficulties with learning to read, has followed several major strands. Along with similar activity elsewhere, several researchers have sought to predict and prevent reading disability in young children (Banks, 1970; Herbert, 1973; McLeod, 1965, 1967; Neale, 1973, 1974). Apart from the considerable test construction efforts of the Australian Council for Educational Research and the pioneering efforts of Schonell and Schonell (1962), some interesting work has been done in the measurement of reading. McLeod (1965), McLeod and Anderson (1973) and Elkins and Andrews (in press) have developed "cloze" procedure reading comprehension tests which have found wide acceptance. McLeod and Atkinson (1973) developed a criterion-referenced test of phonic knowledge with accompanying prescriptive teaching materials.

Another area of research related to underachievement in reading is that dealing with self-concepts (Andrews, 1965; Staines, 1958).

Experimentation in teaching methods has not been as varied as in the U.S. (Jackson, 1969). Most schools use books and reading schemes developed in Australia, and even the ubiquitous reading laboratories have Australian counterparts. Australian teachers tend

to use personally selected mixtures of various approaches to reading. It is not uncommon to find children in the first grade writing their own stories (language experience), learning colour-coded vowel and consonant sounds (Words-in-Colour), using flash cards (whole word method) and various word family games (both analytic and synthetic phonic approaches). Eclectism is paramount, and if the performance of children on tests normed elsewhere is any guide, Australian reading standards for ages 6 to 9 years are high (McLeod, 1967; Andrews and Elkins, 1971).

However, the major area of reading research has been the psycholinguistic nature of reading.

Following the early work of Hart (1963) and McLeod (1965) using the Illinois Test of Psycholinguistic Abilities (ITPA), a number of studies of the diagnosis and teaching of children with reading difficulties has been reported (Atkinson, 1967; Elkins, 1972; O'Connell, 1971; Pickering, 1973). Relatively little interest has been shown in visual-perceptual-motor approaches to reading disabilities, but the importance of oral language facility as a foundation for reading has found considerable acceptance (Queensland Department of Education, 1972). Two recent research programs have endeavoured to relate psycholinguistic aspects of the child to Goodman's psycholinguistic analysis of oral reading behavior (Ryan, 1973; Andrews, Cochrane and Elkins, in preparation). These studies illustrate that the adoption

of programs of language development, whether non-specific (e.g. Peabody Language Development Kit) or particularized (e.g. ITPA-based), have been grafted onto, rather than replaced, a concern for the reading task itself. Observations by the author while visiting projects for children with learning disabilities in the U.S. this year have led to the conclusion that American teachers tend to follow particular approaches more closely, rather than selecting and adopting from various programs.

Yet another area of psycholinguistic research in reading is that conducted by the Bernard Van Leer Foundation project on Aboriginal education (1970). Here extensive programs have been devised to minimize mismatch between the oral language of Aboriginal children and reading materials. An outcome of this project is the large corpus collected by Hart of oral language of first grade children. One application currently being pursued is to test the correspondence between the oral language patterns of the children and the language of early reading books.

Remedial Reading and Learning Disabilities

It seems that in the United States the responsibility for helping children with learning disabilities has not been resolved. Consider the definition accepted by Congress:

> Children with special learning disabilities exhibit a disorder in one or more of the basic psychological processes involved in understanding or in using spoken or written language. These may be manifested in disorders of listening, thinking, talking, reading, writing, spelling, or arithmetic. They include conditions which have been referred to as perceptual handicaps, brain-injury, minimal brain dysfunction, dyslexia, developmental aphasia, etc. They do not include learning problems which are due primarily to visual, hearing or motor handicaps, to mental retardation, emotional disturbance or to environmental disadvantage.

This description may seem fairly clear, but in practice things do not turn out so clearly. A survey currently being conducted by the Leadership Training Institute in Learning Disabilities has shown that about 80% of children in learning disability programs in several regions of the U.S. are receiving primary assistance in reading. It is also apparent that these children exhibit a wide range of severity, expecially in the early grades. Professional responsibility for these children may be accepted by regular classroom teachers, reading specialists, learning disability personnel or in some cases, speech therapists. In the midst of such confusion, it is important that children should not suffer.

Lerner (1974) has provided an excellent review of this problem in the American context in a paper entitled "Learning Disabilities and Remedial Reading: Same or Different." Her analysis of the two viewpoints which have been taken traced the different historical

backgrounds from which special educators and reading specialists have approached children with inadequate reading. "In spite of these seeming conceptual separations, operationally the two fields may be quite similar" (Lerner, 1974, p.3). Thus, though learning disabilities has emphasized the correlates of the problem and the intra-individual differences which may underly the difficulties, and the reading specialist may concentrate upon the analysis of reading skills, there is a great deal of similarity in the actual teaching procedures used.

An Australian observer might be surprised at the existence of such a division. Firstly, the reading specialist of the North American scene is not a regular feature in Australian education. The strong tradition of remedial reading is generally perceived as part of special education, as are guidance and counselling also. However, remedial education has been deeply committed to the approaches of remedial reading in spite of the adoption of many ideas from the learning disabilities movement.

Of course the fact that there has been essentially a single administrative approach to providing services to children who exhibit learning problems, may explain why a distinction between learning disabilities and remedial reading seems largely artificial. Thus, without formally defining learning disabilities, Australian

children are helped with difficulties in basic skill learning in various ways according to the perceived intensity of the problem. I will use the pattern of provision in the State of Queensland as an example. Teachers are strongly encouraged to act as the first line of attack on children's difficulties. It is increasingly common to find techniques of diagnosis and prescriptive teaching included in the initial training of elementary school teachers, and inservice opportunities are also available. The teacher may seek support from advisory teachers and have children assessed by clinical guidance officers.

For more difficult problems, but only after independent psychological assessment and consultation with parents, children may receive remedial instruction in resource rooms or from itinerant teachers. This help is usually of 1½ hours twice a week and, though the teacher will have five children at the same time, the program will be largely individualized. The third level of assistance is provided for very few children, certainly less than one percent, who may be placed in self-contained classes of about six children. It is common for these children to stay in the self-contained classroom for about two years, but the goal is to permit them to return to the regular classroom. These are the only children who are described as having specific learning disabilities.

Current trends

In a previous paper (Elkins, 1971), I suggested that there needed to be a coordination of the approaches which emphasize variables within the child and those which emphasize the components of the learning process. At the beginning of this decade, considerable interest was being shown in the development and verification of an adequate model of the reading process, and work toward this goal has been intensified (Geyer, 1972; J. Mackworth, 1972; N. Mackworth, 1972). Although there are some studies which support the idea that one should teach to the deficit areas in order to produce improvement in reading, the evidence is far from conclusive (Hammill & Larsen, 1974). Others have suggested a more conservative attitude, that psychometric evaluation of the child aids in selecting instructional strategies which may be appropriate. Thus a child who exhibits poor auditory memory and sound blending skills might be taught to read using other than phonic methods. This approach belongs to the field of aptitude-treatment interactions, where, although there are signs of tantalizing promise, research evidence is far from adequate.

In summary then, we need to study children with different levels of reading achievement to relate underlying psychological and linguistic abilities upon which mastery of different component reading

skills is dependent. In studies conducted since 1970, some evidence has been obtained that different skills are significant as reading progresses (Elkins, 1972, 1973). In grades one to three, there is a common relation between the verbal aspects of cognitive ability and reading, but in first grade the ITPA subtest Sound Blending discriminates most markedly between successful and failing readers, even after differences in intelligence are removed. In second grade Sound Blending is still important, but less so; while Auditory Memory and Grammatic Closure are useful discriminators. In Grade 3, Sound Blending is no more significant than other auditory channel subtests, while Grammatic Closure is the skill most closely related to reading. Although this evidence does not help relate cognitive patterns directly to components of reading, since global reading achievement measures were used, it does remind us that the reading task is different at different stages of development and provides evidence that the cognitive abilities which are necessary for success change as reading progresses from halting word recognition and analysis to simple fluency.

In a continuing study at the Schonell Centre, a sample of 144 third grade children was used. Twenty-four cognitive variables were related to eight reading measures using a canonical correlation. Three significant dimensions were identified, which for

reading were (1) a global reading proficiency which was common to oral and silent reading and to accuracy and comprehension. As expected the best predictors of this dimension were Grammatic Closure, Sentence Repetition (Clay, 1971), and to a lesser extent, the auditory channel of the ITPA and several measures of intelligence. The second dimension of reading was concerned with phonic knowledge and was predicted by Sound Blending. The third dimension was represented by one silent reading comprehension test and eye-voice span. The cognitive variables related to this dimension were a number matching task and Visual Closure. Since a cloze-procedure silent reading comprehension task was not related to this dimension, a tentative interpretation of this third relationship is a speed factor. In some respects the present investigation has not proved very successful in teasing out the component reading skills, since 69% of the variance of the reading measures was accounted for by the first canonical relationship, while the second and third canonical variables accounted for 8% and 5% respectively.

A continuing aspect of the study is the analysis of oral reading miscues of this sample using Goodman's (1969) approach. It is hoped to identify reading behaviour characterized by errors of graphemic, phonemic, syntactic and semantic types, as well as evidence of strategies such as self correction which have been shown to be typical of early reading success (Clay, 1969).

Final Comments

In both the United States and Australia significant governmental support has been provided for children with learning disabilities. Nevertheless there are some areas of concern. First, these children are subject to overlapping professional and administrative concern, and care will be needed to ensure that children's needs do not suffer from professional rivalry or administrative convenience. Second, there is an inadequate research base on which to plan services. I believe we have seriously underestimated the cost of adequate educational research. Studies of reading disability are plagued by low N, inadequate specification of the target group and poor control or comparison. Also the art of program evaluation is very new, and we have little knowledge of the cost-effectiveness of educational intervention in reading disabflities. Third, and most important, I believe that much has to be done to exclude poor educational performance due to poor teaching in the regular classroom. Classroom teachers need better preparation to teach basic skill subjects to all children, not just those who learn easily. As Otto commented in 1972 "Until we can make such an assumption, (adequate instruction for the child) we ought not to dissipate much of our effort in pursuing other than educational factors as causes of reading disability." (p.10)

REFERENCE


Andrews, R. J. & Elkins, J. The use of the Neal Analysis of Reading Ability with lower grade primary school children. The Slow Learning Child, 1971, 18(1), 3-7.

Andrews, R. J. The self-concepts of good and poor readers. The Slow Learning Child, 1971, 18(3), 160-167.

Andrews, R. J., Cochrane, R. G. & Elkins, J. A study of the interaction between the psycholinguistic characteristics and component reading skills of grade three children. Brisbane. Fred and Eleanor Schonell Educational Research Centre, University of Queensland, in preparation.

Atkinson, J. K. Reading improvement through psycholinguistic remediation. The Slow Learning Child, 1967, 14, 103-116.

Banks, E. M. The identification of children with potential learning disabilities. The Slow Learning Child, 1970, 17(1), 27-38.

Bernard Van Leer Project. Research report on some aspects of the language development of pre-school children. Brisbane: Department of Education, 1970.

Clay, M. M. Reading errors and self-correction behaviour. British Journal of Educational Psychology, 1969, 39, 41-56.

Clay, M. M. Sentence repetition. Elicited imitation of a controlled set of syntactic structures by four language groups. Monographs of the Society for Research in Child Development, 1971, 36(3, Serial No.143).

Elkins, J. Some psycholinguistic aspects of the differential diagnosis of reading disability in grades I and II. Unpublished doctoral thesis, University of Queensland, 1972.

Elkins, J. & Andrews, R. J. St. Lucia Reading Comprehension Test. (in press)

Geyer, J. J. Comprehensive and partial models related to the reading process. Reading Research Quarterly, 1972, 7, 541-587.

Goodman, K. S. Analysis of oral reading miscues: applied psycholinguistics. Reading Research Quarterly, 1969, 5, 9-30.

Hammill, D. & Larsen, S. C. The efficacy of psycholinguistic training. Mimeo, 1974.

Herbert, G. F. Parramatta Test of Developmental Levels for Infant Grades. The Slow Learning Child, 1973, 20(1),20-38.

Interim Committee for the Australian Schools Commission. Schools in Australia. Canberra: Australian Government Publishing Service, 1973.

Jackson, M. S. The Structured Alphabet. The Slow Learning Child, 1969, 16(2), 112-117.

Jackson, M. S. The visuo-thematic approach to the teaching of reading and language to backward readers. The Slow Learning Child, 1969, 16(3) 172-182.

Lerner, J. W. Learning disabilities or remedial reading: same or different? Paper read at ACLD International Conference, Houston, March, 1974.

Mackworth, N. H. Seven cognitive skills in reading. Reading Research Quarterly, 1972, 7(4), 679-700.

Mackworth, J. Some models of the reading process: learners and skilled readers. Reading Research Quarterly, 1972, 7(4), 701-733.

McLeod, J. GAP Reading Comprehension Test. Melbourne: Heinemann, 1965.

McLeod, J. Some psychological and psycholinguistic correlates of severe reading disability in children. Unpublished doctoral thesis, University of Queensland, 1965.

McLeod, J. From Labels to Action. The Slow Learning Child, 1967, 14(2), 97-102.

McLeod, J. & Atkinson, J. K. Domain Phonics Test. Edinburgh: Oliver & Boyd, 1972.

McLeod, J. & Anderson, J. GAPADOL Reading Comprehension Test. Melbourne: Heinemann, 1973.

Neale, M. D. Social alignment and educability. The Slow Learning Child, 1973, 20(1), 3-19.

Neale, M. D. And gladly wolde he lerne, and gladly teche - strategies of intervention for learning disorders. Paper read at the ACLD International Conference, Houston, 1974.

O'Connell, T. J. Reading in Australia. In Bracken, D. K. & Malinquist, E. (Eds) Improving reading ability around the world. Newark, Delaware: International Reading Association, 1971.

Otto, W. Adequate reading instruction: fact or fantasy? The Slow Learning Child, 1972, 19(1), 3-11.

Pickering, D. M. An examination of the psycholinguistic abilities and disabilities of Grade 2 children of differing socio-economic status and ethnic background - Greek and Australian. Paper presented at Australian College of Speech Therapy Conference, Melbourne, Australia, March 1973.

Queensland Department of Education. Improving reading through an oral language program. Bulletin 39, Research and Curriculum Branch, Brisbane, 1972.

Ryan, D. An examination of the psycholinguistic abilities underlying efficient reading behaviour in primary school children. Paper presented at Australian College of Speech Therapy Conference, Melbourne, Australia, March, 1973.

Schonell, F. J. & Schonell, F. E. Diagnostic and Attainment Testing (4th ed) Edinburgh: Oliver and Boyd, 1962.

Staines, J. W. The self picture as a factor in the classroom. British Journal of Educational Psychology, 1958, 28(1), 97-111.